

Sprint 5 Report

Team: eLation Nation

Project: eLation Mobile Apps

Project Sponsor: Innovative Systems LLC

Spring Duration: February 13, 2013 to March 13, 2013

Team members:

- Michael Malkowski
- Rachel Pekarek
- Jeremy Warner

Project Sponsor: Innovative Systems LLC

Meetings/Client Interactions

- 2/12/13
 - Scrum Meeting
 - Updated Client with progress
- 2/19/13
 - Scrum Meeting
 - Updated Client with progress
- 2/26/13
 - Scrum Meeting
 - Updated Client with progress
- 3/13/13
 - Sprint planning Meeting
 - For Sprint 6

Sprint Tasks

Our sprint tasks were divided into the following categories:

- Android
 - Research
 - Research Saved Instance
 - Technician Application
 - Horizontal Scrolling
 - Expand/Collapse All
 - Implement new Diagnostics Query and UI
 - Diagnostics Running Loader (Cancel functionality)
 - Implement App Icon
 - Diagnose Icons
 - Logging
 - Maintain App Life
 - eBill Application
 - Database Storage
 - Logging
 - Adjust Payment History
 - Login Pages
 - Add Warning Message when saving login information
 - Implement App Icon
 - PDF Loading (Cancel functionality)
 - Current Usage Implementation
 - Make Payments
 - Adjust List View Items
 - Fix Service Summary Layout
 - Implement Core UI
 - Account Items
 - Maintain App Life
 - Landscape Mode
 - Bugs
 - Verify Numerical Date Mismatch is resolved
 - Verify Current Usage Invoice/Service ID bug resolved
- Apple
 - Research
 - Horizontal Scrolling
 - Technician Application
 - Implement Technician Application Icon
 - Diagnose Icons
 - eBill Application
 - Implement Account Items
 - Core UI Implementation
 - Current Usage
 - Support Retina Display

- Landscape Mode
 - Logging
 - PDF Loading (Cancel functionality)
 - Adjust Payment History
 - Warning message when saving login information
 - Make payments on an account
 - Database Storage
 - Implement new DiagnositcsQuery and UI
 - Login Pages
 - Implement App Icon
 - Diagnostic Running Loader (Cancel functionality)
- API
 - Research
 - Investigate Technician Device Authorization (3G vs. Wi-Fi)
 - Investigate Cookie passing
 - Investigate Sending emails from app
 - API
 - Add Date formatting options
 - Look at how AccountList should respond to invalid logins
 - Change Error handling to avoid MIME type and Content Length restrictions
 - Add trouble ticket functionality
 - Add enum to PayWithSavedCard
 - Add logging to API
 - Get SDP Authentication refactored and done on Android
 - Refactor all _IMSI variables out of SDP API
 - Change all makePUT, makeGET, etc. function calls to a single function
 - Implement, test, and fix PayWithSavedCard
 - Fix parsing in SDP API after server update
 - Add functionality to AccountOverview to pass back from and thru dates as numbers
 - Update eBill PaymentHistory and PaymentInfo
 - Add error conditions to make payment and make everything but payment status optional
 - Bugs
 - Fix Numeric Date Mismatch
 - Test Apple/Android response when we get a 403 error and no content
 - Fix bug with Current Usage and invoice/service IDs
 - Unit Tests
 - Set up API tests for Apple
 - Set up API tests for Android
 - Build as much as possible
 - Documentation
 - API Documentation

Goals Met

This section will detail the goals we were able to meet for this sprint.

- Android
 - Research
 - Research Saved Instance
 - Technician Application
 - Horizontal Scrolling
 - Expand/Collapse All
 - Implement new Diagnostics Query and UI
 - Diagnostics Running Loader (Cancel functionality)
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 - Verify Numerical Date Mismatch is resolved
 - Verify Current Usage Invoice/Service ID bug resolved
- Apple
 - Technician Application
 - Implement Technician Application Icon
 - Diagnose Icons
 - eBill Application
 - Implement Account Items
 - Core UI Implementation
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 - Support Retina Display
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 - Logging
 - PDF Loading (Cancel functionality)
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 - Warning message when saving login information
 - Make payments on an account
 - Database Storage

- Implement new DiagnosticsQuery and UI
 - Login Pages
 - Implement App Icon
 - Implemented Call ID's for Cancel functionality
- API
 - Research
 - Investigate Technician Device Authorization (3G vs. Wi-Fi)
 - Investigate Cookie passing
 - Investigate Sending emails from app
 - API
 - Look at how AccountList should respond to invalid logins
 - Change Error handling to avoid MIME type and Content Length restrictions
 - Add trouble ticket functionality
 - Add enum to PayWithSavedCard
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 - Bugs
 - Fix Numeric Date Mismatch
 - Test Apple/Android response when we get a 403 error and no content
 - Fix bug with Current Usage and invoice/service IDs
 - Unit Tests
 - Set up API tests for Apple
 - Set up API tests for Android
 - Build as much as possible

Goals Not Met

This section will detail the goals we did not meet for this sprint

- Android
 - Technician Application
 - Logging
 - Maintain App Life
 - eBill Application
 - Fix Service Summary Layout
 - Account Items
 - Need to finish all email functionality
 - Maintain App Life
 - Landscape Mode
- Apple
 - Research
 - Horizontal Scrolling
 - Discovered this is possible, however it must be implemented programmatically rather than through the StoryBoard Interface Builder. It has been put on the backlog for Sprint 6.
 - eBill Application
 - Implement Account Items
 - Change Default Email is waiting on implementation from the API
 - Core UI Implementation
 - Didn't get Change Invoice Delivery done, Change Email and Support page were not part of this sprint
- API
 - API
 - Add Date formatting options
 - This is a minor feature add for a few parts of the API. It got pushed back and was not completed.
 - Unit Tests
 - Build as much as possible
 - Got a significant portion of the Unit tests written, but more need to be implemented.
 - Documentation
 - API Documentation
 - This got pushed back as the focus was more on the Unit tests this sprint.

Research/Code Experiments

Jeremy worked on several research items this sprint. First, passing cookies via the current HTTP objects in place was investigated. This is quite possible, and allows for the future implementation (outside of senior design) of a token-passing system.

Second, sending email messages from within applications (without user input) was investigated to handle the trouble ticket requirement. It is possible to do so, using third party APIs, in the Android environment. Research indicated that it was not possible within the Apple environment without throwing a new intent and informing the user. An API call was then implemented to give basic email relay functionality.

Finally, device specific authentication was investigated for the Technician application. Enough issues with finding a constant device-specific identifier were found between different platforms that it was decided to move to a username-password system for authentication.

Mike researched the ability to maintain the app state for various cases of app life cycle. The result was found after going through a previous implementation found from an older app. This research led to the use a Bundle that can be saved to the app memory and read from that same memory on app startup.

Product Backlog

- Android
 - Technician Application
 - Logging
 - Maintain App Life
 - Save Login Information
 - UI Testing
 - Device/Version Testing
 - eBill Application
 - Fix Service Summary Layout
 - Account Items
 - Need to finish all email functionality
 - Maintain App Life
 - Landscape Mode
 - Support Page
 - UI Testing
 - Device/Version Testing
- Apple
 - Technician Application
 - Horizontal Scrolling
 - UI Testing
 - Device/Version Testing
 - eBill Application
 - Account Items
 - Need to implement revised email functionality
 - Support Page
 - UI Testing
 - Device/Version Testing
- API
 - API
 - Add Date formatting options
 - Change Default Email setup
 - 403 Error testing
 - Implement forked Cookie/Token-capable API
 - Some Refactoring and misc. work
 - Testing
 - Finish Unit Tests
 - API System Tests
 - Documentation
 - API Documentation
- Documentation
 - Work on CONOPS
 - Work on Requirements/Design Document